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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/713,517	11/14/2003	Alfred J. Bilotti	PAT-1537	9961

7590

05/04/2005

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EXAMINER

SAWHNEY, HARGOBIND S

ART UNIT	PAPER NUMBER
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2875

DATE MAILED: 05/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/713,517

Applicant(s)

BILOTTI ET AL.

Examiner

Hargobind S. Sawhney

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>11/14/03</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 5-7, 8, 12-15 and 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pan et al. (US Patent No.: 6,439,249 B1) in view of Mai (US Patent No.: 5,954,417)

Regarding claims 1, 8 and 15, Pan ('249 B1) discloses a lighting system used with a patio umbrella, and the lighting system comprising:

- a plurality of light emitting units 5 spaced apart along a wire branch 33 releasably attached to one of the ribs 3 (Figures 1-4, column 2, lines 53-62); and
- a wire 8 electrically coupling the power supply – either external conventional AC power or battery with housing- to the wire branch 33 (Figures 1-4, column 2, lines 53-62, and column 3, lines 25-28).

However, Pan ('249 B1) does not specifically teach the lighting system including a plurality of light emitting diodes (LEDs) as the light source.

On the other hand, Mai ('417) discloses an umbrella 3 with illuminators each comprising a plurality of interconnected LEDs 83 powered with a battery 81 (Figures 1 and 2, column 2, lines 61-66).

It would be have been obvious to one of ordinary skill in the art at the time of the invention to modify lighting system of Pan ('249 B1) by providing at least one LED as the light source as taught by Mai ('417) for benefit and advantage of compactness, high energy efficiency and long operating life as compare to that of an incandescent light bulb.

Regarding claims 5-7, dependent on claims 1,5 and 6 respectively, Pan ('249 B1) in view of Mai ('417) discloses the light system further comprising:

- a plurality of branch wires 33 each having a plurality of LEDs spaced apart from one another (Pan, Figures 1-4, column 2, lines 53-62) and (Mai, Figures 1 and 2, column 2, lines 61-66);
- an interconnecting wire 8 interconnecting the branch wires 33 (Pan, Figure 1, column 3, lines 17-20), and the interconnecting wire 8 secured to the pole at the outlet aperture 11 (Pan, Figure 1).

Regarding claim 12-14, Pan ('249 B1) in view of Mai ('417) discloses the light system meeting the limitations in similar manner as that for rejection of claims 5-7 detailed above.

Regarding claims 17 and 18, Pan ('249 B1) in view of Mai ('417) discloses the light system meeting the limitations in similar manner as that for rejection of claims 5 and 6 detailed above.

Regarding Claim 19, dependent on Claim 15, Pan ('249 B1) in view of Mai ('417) discloses the light system further including a collector 2 coupling the plurality of wire braches (Pan, Figure 1, column 2, lines 9-12).

3. Claims 2, 3, 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pan et al. (US Patent No.: 6,439,249 B1) in view of Mai (US Patent No.: 5,954,417) as applied to Claim 8 above, and further in view of Phyle (US Patent No.: 5,584,564).

Regarding claims 2 and 9, dependent on claims 1 and 8 respectively, Pan ('249 B1) in view of Mai ('417) discloses the light system further comprising a battery housing 81 mounted underside of the umbrella cover 3 (Mai, Figure 2, column 3, lines 7 and 8). However, neither combined nor individual teaching of Pan ('249 B1) and Mai ('417) discloses a mounting bracket releasably mounted on the pole of the patio umbrella, and the battery housing being releasably mounted to the mounting bracket.

On the other hand, Phyle ('564) disclose a battery operated lighting apparatus for an a patio umbrella (Figures 5 and 6) including a removable mounting bracket 38 mounted on the pole 20 of the umbrella, and the battery housing 34 being releasably mounted to the mounting bracket 38 (Figures 7 and 8, column3, lines 25-44).

It would be have been obvious to one of ordinary skill in the art at the time of the invention to modify lighting system of Pan ('249 B1) in view of Mai ('417) by providing an assembly of removable battery housing with a bracket as taught by Phyle ('564) for

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benefit and advantage of a battery housing mounting providing easy access and quick mounting of the power source.

Regarding claims 3 and 10, dependent on claims 2 and 9 respectively, Pan ('249 B1) in view of Mai ('417) and Phyle ('564) discloses the light system further comprising the battery housing including a pocket – 34 accommodating the mounting bracket 38 within itself (Figures 7 and 8).

4. Claims 4, 11, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pan et al. (US Patent No.: 6,439,249 B1) in view of Mai (US Patent No.: 5,954,417) as applied to Claim 8 above, and further in view of Minato et al. (Japanese Patent No. 200070020) hereinafter referred as Minato.

Regarding Claim 4, dependent on Claim 1, Pan ('249 B1) in view of Mai ('417) discloses the light system further comprising a plurality of branch wires each having a plurality of LEDs spaced apart from one another. However neither combined nor individual teaching of Pan ('249 B1) and Mai ('417) discloses the lighting system including a plurality of LEDs attached to a printed circuit board (PCB), and a chip-driver connected to the PCB.

On the other hand, Minato discloses an ornamental umbrella having a plurality of LEDs 21 operationally coupled to a chip-driver 22 connected to a PCB (Figures 1 and 2, and English translated abstract).

It would be have been obvious to one of ordinary skill in the art at the time of the invention to modify lighting system of Pan ('249 B1) in view of Mai ('417) by providing the chip-driver connected to the PCB bearing LEDs taught by Minato for benefit and

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advantage of improving ornamental and attraction values with a variety of illumination patterns.

Regarding Claim 11, dependent on Claim 8, Pan et al. ('249 B1) in view of Mai ('417) and Minato discloses the light system meeting the limitations in similar manner as that for rejection of Claim 8 detailed above.

Regarding Claim 16, dependent on Claim 15, Pan et al. ('249 B1) in view of Mai ('417) and Minato discloses the light system meeting the limitations in similar manner as that for rejection of Claim 8 detailed above.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kuelbs (U.S. Patent No. 6,612,713 B1), Li (U.S. Patent No. 6,598,990 B2), Mai (U.S. Patent No. 6,270,230 B1), Wu (U.S. Patent No. 6,089,727), Morgan (U.S. Patent No. 5,611,614), Tu (U.S. Patent No. 5,502,624), Takatsuki (Japanese Patent No. JP 11299517 A) and Oshio (Japanese Patent No. JP 409037823 A)


6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hargobind S Sawhney whose telephone number is 571 272 2380. The examiner can normally be reached on 6:15 - 2:45.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on 571 272 2378. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

HSS
4/26/2005


Stephen Husar
Primary Examiner